

N.B. Naturalist

Le Naturaliste du N.-B.

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J.M.H.

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Dates limites de présentation de vos articles, réflexions, avis et dessins: les 1er janvier, 1er avril, 1er juillet et 1er octobre. Les dessins au trait doivent être préparés à l'encre noire et dans le format de publication.

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Cover Illustration

Red Maple. Pen and ink drawing
by Mary Majka.

Illustration de la couverture

Érable rouge. Dessin à la plume
par Mary Majka.

From the President

Shortly after the last issue of the *N.B. Naturalist* went to press, our editor and president, Gayl Hipperson, received and accepted an offer of a permanent position with the Saskatchewan Museums Association.

It will be very difficult to sustain the dedication, resourcefulness and good humour that Gayl continually maintained in her dual rôles. The *N.B. Naturalist* continued to improve and became a more respected and noteworthy publication under her professional guidance. Her ability to ferret out interesting authors and articles and her insistence on manuscript deadlines made Gayl an exceedingly valuable member of the editorial team.

I cannot serve the Federation in the dual rôles of editor and president, but as president I will try to continue to lead our organization as so many of our fine New Brunswick naturalists have done in the past. It is an honour to be able to volunteer my services for such a worthy organization.

I hope you will continue to support your organization in such ways as you can; through your membership and by bringing in new members; through your special donations of money; through your contribution of articles and news items for the *N.B. Naturalist*; through volunteering to lead field trips; or just through letters of support. You are the essential ingredient of all our efforts. Please write to us as often as possible, voicing your concerns, reporting your finds, seeking information or presenting your views.

WHAT YOUR ORGANIZATION DOES FOR YOU:

1. Fosters the enjoyment of nature through learning and the exchange of information.
2. Represents you as a provincial voice on issues affecting nature, such as the new general hunting licence, irresponsible use of ATV's, Lepreau II, Canadian Wildlife Service cutbacks, and park interpretation cutbacks.
3. Publishes the provincial nature magazine, the *N.B. Naturalist/Le Naturaliste du N.-B.*
4. Provides an annual nature camp scholarship for New Brunswick youth.
5. Encourages the study of natural history of our province, for instance, supporting the natural area inventory project.
6. Sponsors educational projects, such as nature-oriented slide programs.

Hal Hinds

My Friends, the Trees

Mary Majka

Once a year, at Christmas time, our attention and affection are focussed on a tree. But what about other times of the year? And what about other trees that surround us, shelter us, shade us from the hot summer sun, and make our houses warm in winter? What about the trees that we pass on our walks, or the one under which we sit to have a picnic or lie down to take a nap?

Have you ever tried to get acquainted with a tree? First, you touch its bark, then you shake a branch, as you would shake a hand, and when you look up into its crown you see its nodding head and hear a whisper of welcome. Don't just stroll on! Now it's time for the tree to get to know you.

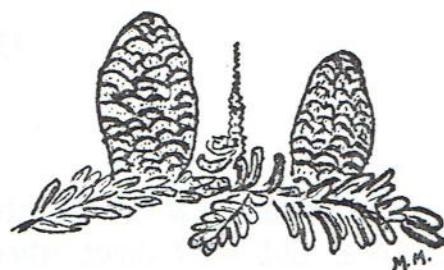
*One space spreads through all creatures equally—
inner-world-space. Birds quietly flying go
flying through us. O, I that want to grow!
the tree I look outside at's growing in me!*

— Rainer Maria Rilke

A tree will get to know you with its own senses. After you have stood or sat beneath its crown a while you will feel that you have a friend. From then on, every time you pass that tree, you will be greeted. There might be a time when, troubled, you come to see your friend; the tree will take you in its cool, green realm, calm you and refresh you, and you will leave consoled. I even ask my friends the trees (for I have a number of tree friends) to help me in difficult decisions. I have never been turned down.

With the coming of spring there is lots of activity in our hardwood forests. The first spring gift of the trees heralds the end of winter and sweetens our year. Then comes a time of sheer magic when the power of the sun transforms every branchlet. The trees suddenly change colour, shape and volume and stand, a banner of joy and happiness.

This year has been designated the year of youth by the United Nations. A new organization, the Richard St. Barbe Baker Foundation, knew that youth and trees have a lot in common. And so it organized The Tree Conference, held near Montreal, which brought together representatives from different organizations. I was invited because of my work with young people, and as a director of the C.N.F. I could not have been more pleased with the things that I was able to learn and



which I want to put to use in my work. "The Tree Project" promotes the planting of trees throughout the world. Many young people will be involved. Trees are threatened on an unprecedented scale and when we realize how very essential they are to our lives, yes, to our survival and the survival of our planet, we start to understand why, especially during the Year of the Youth, we should celebrate trees as well.

Both are precious and threatened; both reach into the future, free and full of hope while their roots probe and search for safe and fertile ground.

This issue of *N.B. Naturalist* is dedicated to the trees.



Official Provincial Tree

Can we stop now that a species of bird as well as of flower have been officially recognized as symbolic of New Brunswick? Two provinces, Ontario and Alberta, have recently chosen the white pine and the lodgepole pine, respectively, as their official trees. The Canadian Forestry Association of New Brunswick has nominated the balsam fir as the most appropriate choice for the province. Naturalists should also have ideas on this topic. What about it? If you feel the New Brunswick Federation of Naturalists should have an entrant in the official tree stakes, let us know, giving the reasons for your choice. If we can achieve consensus we'd be happy to present our candidate to the province.

Peter Pearce



Tree Project Enlists Youth to Plant Trees



Jodi Jackson*

In an effort to combat increasing deforestation in the tropics and subtropics, international non-government organizations (NGOs) have joined forces in a unique collaborative effort with the United Nations to create The Tree Project. A programme of the Non-governmental Liaison Service, The Tree Project aims to help reforest the earth by linking NGOs, U.N. agencies and governments in planting trees.

The Tree Project began as an activity for the U.N.'s International Youth Year, 1985. In 1982, the U.N. General Assembly began preparations for IYY, with the theme of promoting participation, development and peace by encouraging cooperative activities among young people. A major goal was to increase the awareness and involvement of youth in activities for the protection and enhancement of the global environment.

At the heart of International Youth Year is the idea that the future of forests is directly linked to the ability of the younger generation to recognize the value of this precious and potentially renewable resource. The U.N.'s "For Every Child a Tree" programme in 1982 was also based on this concept. By harnessing the energy and intelligence of the world's youth, IYY planners hoped to increase youth's potential as stewards of the earth's resources. They also hoped to alert young people to the fact that the loss of forest resources is a grave problem in many countries today.

Deforestation has many adverse social and environmental consequences. Forest cover prevents soil erosion, protects wildlife and biological diversity, and has myriad other ecological benefits. Trees are an important source of food crops (i.e. fruits and nuts), fuelwood, fodder, and timber. Many of today's medicines have been synthesized from natural plant compounds in tropical forests, now fast disappearing. In many rural areas, deforestation most adversely affects women and children. As the traditional collectors of firewood, they will often spend several days a week at this task, going further and further afield to find fuelwood.

The Tree Project was formed to support local level responses to the common problems of deforestation. Today, several hundred NGOs around the world

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are involved. Cooperation, networking and education are at the roots of the project's efforts. The strategy to extend these roots includes consultations in developing nations, information collection and a worldwide promotional campaign. These activities are coordinated by the International Tree Project Clearinghouse (ITPC), headed by Jill Carr-Harris and a small but energetic professional staff.

The ITPC provides information on NGO forestry projects to promote tree planting and link NGOs together. Using a databank of detailed information on forestry and related projects compiled over the last year, the ITPC acts as a clearing house to match the specific financial and information needs of one organization with the resources of others.

Country consultations among NGOs, donors, and government representatives will encourage information exchanges and broaden the scope of local involvement in forestry. Three consultations have been planned so far this year, the first in Senegal (February), then Haiti (August) and later in India. Meetings like these will allow NGOs with limited resources to share ideas and identify potential donors. Forestry and technical assistance experts will address questions such as how to choose suitable species, obtain seed, and how to plant and care for trees over the long term. The Tree Project staff is also working on other regional meetings, such as a proposed Environment and Development Conference on the East Coast of the United States.

Planting trees to renew depleted forests is not a new phenomenon. Several governments and private groups have been involved in tree planting efforts over the past decade. Governmental programmes for tree planting include Vietnam, where 14 million students and 500,000 teachers in schools and colleges throughout the country are involved in planting trees. Their goal: "to cover the plains, highlands and mountainous areas with green leaves". In China, a country once verdant with lush forest, afforestation campaigns are launched each spring. The youth of that country volunteered to plant 2.6 billion trees in 1984 alone. Other nations, such as Guatemala, Rwanda, Nepal, Bangladesh, Ethiopia, Canada and the U.S., to name a few, have also declared their support of tree planting programmes for International Youth Year.

There are many notable examples of non-governmental efforts to engage young people in forestry as well. For instance, Katimavik, the Canadian national youth volunteer programme has made preparations for a major effort in support of IYY.

Katimavik's projects encompass all aspects of forest renewal and maintenance, and encourage public participation in the objectives of The Tree Project. They have launched a major environmental awareness programme involving youth in outdoor work that is relevant to Canadian society as well as to the international community. In 1984, Katimavik leaders planned tree planting projects across the nation, hoping to enlist 600 of their participants at 60 project sites. Instead, they wound up involving about 300 projects and nearly 3000 participants! During Forestry Week in May 1984, Katimavik participants planted 500,000 trees in Ontario alone, and a ten thousand tree red spruce forest in Nova Scotia. In all, their combined efforts resulted in two million trees being planted across Canada in 1984.

Boy Scouts International has long been involved in tree planting. Since 1969, the Boy Scouts of the Philippines have supported government efforts to conserve forests and watersheds all over that country. Now they are cooperating with the Bureau of Forest Development to "regreen" areas of Mount Apo, the highest mountain in the Philippines. They expect to plant 10,000 tree seedlings. Scouts have also participated in Senegal, Nepal, Peru, India, and other countries.

KENGO (Kenyan Energy NGO), while not a youth organization, has incorporated young people into their forestry activities. As a consortium of sixty groups, KENGO acts as a facilitator between assistance agencies and community development groups. By channelling funds through the KENGO network, hundreds of small-scale community projects can be supported. KENGO is deeply involved in all facets of forestry, meeting the needs of rural development organizations, procuring and supplying tree seed and basic materials for community agroforestry, and providing technical assistance in an experimental wood fuel stove programme which is expected to save significant amounts of firewood if successful.

KENGO's Technical Assistance to NGOs Programme (TAP) is encouraging schools to get involved in collecting seeds from indigenous tree species. Both the students and schools that collect the most seed will win a prize.

In 1985, millions of trees will be planted by the hands of youth and adults alike. But the task of "regreening" the earth will be far from finished. For this reason, The Tree Project has been planned as an ongoing effort to help meet the needs of NGOs worldwide, and promote the ideals of stewardship, cooperation, and integrated development. The Tree Project staff hopes to expand its information databank, and increase the effectiveness of its clearinghouse to match needs with resources.

How can you help promote the goals of The Tree Project? Register your groups or organization with The International Tree Project Clearinghouse. Encourage tree planting projects in your community. Arrange for the continued care and nurturing of trees that are planted. Look into partnership programmes that could link your group with groups in another country, furthering cooperation and sharing of resources. For more information, contact the ITPC at the following address: c/o Non-Governmental Liaison Service, DC2 - Room 1103, United Nations, New York, N. Y. 10017

Here's the Forest... Meet the Trees

Karen Mifflin

Do you have a favorite tree? Perhaps it's a towering white pine or a majestic maple or maybe you're not exactly sure what kind of tree it is. Soon you will be able to answer all your questions in a few short hours at the new Odell Arboretum in Fredericton. An arboretum is a place where trees and shrubs are grown and exhibited for scientific, educational and other purposes.

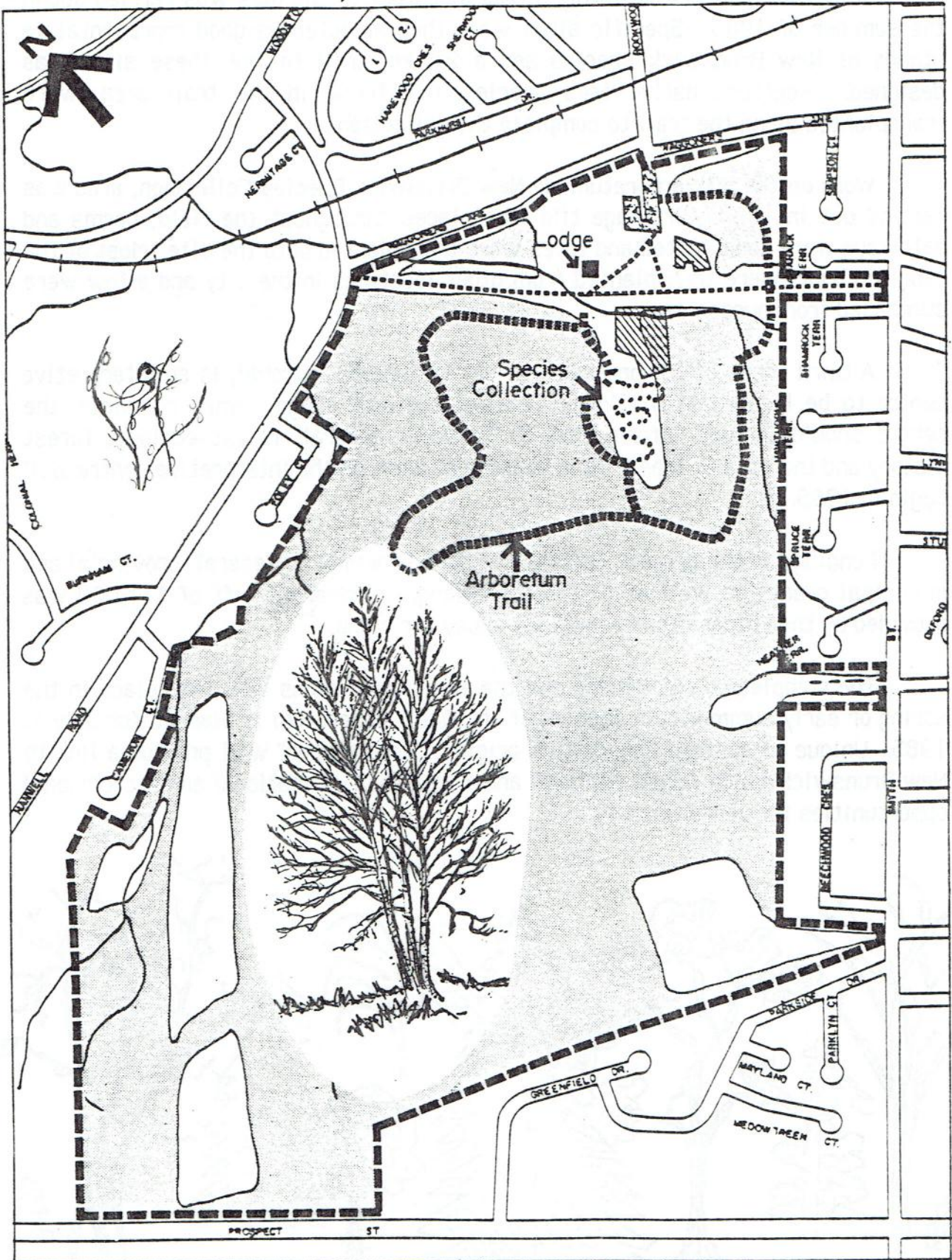
The idea originated in 1981 as a suggestion for a bicentennial project. In 1983 a special arboretum committee was formed to follow through on the idea. The committee includes representatives of the Planning, Recreation, Tourism and Parks and Trees Departments of the City of Fredericton, a landscape architect, a UNB forestry professor and the city's Bicentennial Coordinator.

Several locations were considered for the arboretum but Odell Park with its wide variety of tree species at different stages of growth was the obvious choice. The decision was made to limit the arboretum to New Brunswick's native trees and shrubs. All in all, 41 tree species and 50 shrub species will be included.

As you walk along a woodland trail surfaced with wood chips and bordered by logs or rocks you will be able to learn about the native trees of New Brunswick. Large signs including information on uses, growth habits and identifying features will mark the 41 different tree species along the trail.

For those who would prefer a more park-like setting, the New Brunswick Species Collection - a miniature arboretum - will display all the native trees and shrubs along an easily walked path. Rest areas surrounded by flagstones, small hills or berms and a pond make this area aesthetically pleasing as well as educational.

THE ODELL ARBORETUM, FREDERICTON



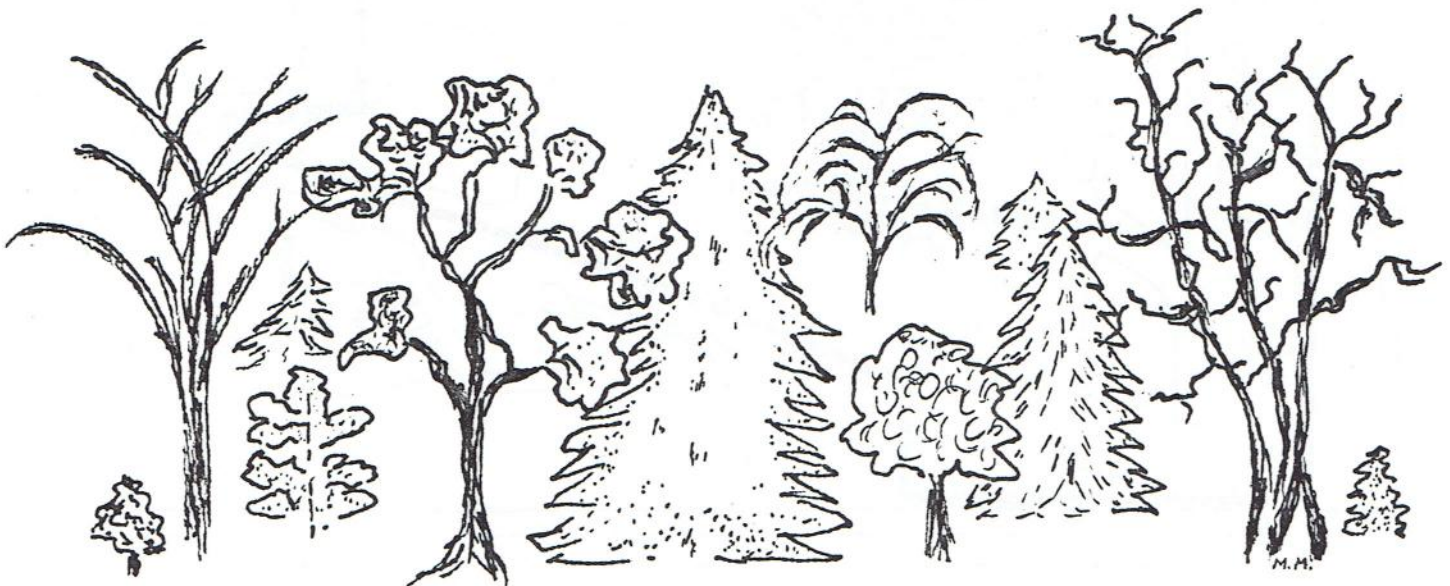
To get the project underway a tree inventory of the park was carried out in the summer of 1983. Specific sites were then selected as good representative stands of New Brunswick species and a 2.5 km trail to link these sites was designed. Fourteen native tree species, not found in the trail area, were transplanted along the trail to complete the collection.

Work on the sub-arboretum, or New Brunswick Species Collection, area was carried out in 1984. Drainage tile was placed throughout the field, berms and pathways were constructed and trees were transplanted onto the site. Most of the required trees were transplanted from other locations in the city and a few were purchased from nurseries.

A third phase of the project, subject to funding approval, is an interpretive centre to be located in the lower level of the park lodge. When complete, the centre should include information on trees in general, forest ecology, forest history and the uses of trees. It is hoped that work on the interpretive centre will begin in 1985.

Funding for the project to date has been provided by federal, provincial and municipal grants as well as private donations. A generous gift of \$11,000 was provided by the Fredericton Foundation to pay for signs.

The completion of planting and the erection of signs will take place in the spring or early summer. An opening of the Odell Arboretum is planned for July 1, 1985. Unique to eastern Canada this original "tree garden" will provide a link to New Brunswick's rich forest heritage and a wealth of educational and recreational opportunities for years to come.



Quels aliments offrir aux oiseaux d'hiver

Louis Lapierre



La pratique d'offrir de la nourriture aux oiseaux pendant l'hiver est maintenant bien répandue dans la société nord américaine. Au Nouveau-Brunswick nous sommes particulièrement choyés parce que les conditions météorologiques favorisent l'hivernation d'une grande variété d'oiseaux. De septembre à avril il est possible d'attirer plus d'une vingtaine d'espèces d'oiseaux à un poste d'alimentation, mais étant donné que chaque espèce manifeste des préférences alimentaires bien marquées il est donc nécessaire de présenter une diète variée si nous voulons satisfaire à la majorité de nos visiteurs.

La pratique courante de distribuer les restes de tables attire souvent une clientèle non désirable qui ressemble étrangement à celle qui fréquente les dépotoirs. Toutefois, certains produits de la cuisine présentent des attraits qu'ils ne faut pas négliger. Le pain, par exemple, excite rapidement plusieurs oiseaux mais il est peu nutritif en hiver. Lors de cette période les oiseaux ont besoin d'une nourriture plus soutenable et le suif et les graines sont des éléments nutritifs qui peuvent répondre aux besoins calorifiques des oiseaux.

Le suif est l'un des aliments indispensables à plusieurs oiseaux hivernants. Les pics et les mésanges le recherchent d'une façon particulière. C'est aussi l'aliment que rechercheront les migrateurs attardés ou égarés.

On peut se procurer des morceaux de suif chez le boucher et les offrir tels quels sans préparations additionnelles. Mais comme le suif rancit rapidement quand le mercure se maintient au-dessus du point de congélation, il faut veiller à le remplacer périodiquement. Un aliment frais est souvent mieux apprécié. Nous pouvons retrouver sur le marché d'innombrables mélanges de graines mélangées au suif. Beaucoup des ingrédients de ce mélange sont tout à fait inutiles, et des oiseaux qui cherchent le gras ingèrent souvent des aliments qu'ils ne connaissent pas. Il n'est donc pas nécessaire de faire l'achat de ces mélanges. Plutôt il s'agit de préparer un poste d'alimentation qui offre les aliments essentiels à la survie des oiseaux hivernants, ils ne manqueront pas à prélever eux-mêmes ce qu'ils jugeront nécessaires à leur survie.

Dans leurs habitats naturels les oiseaux qui hivernent chez-nous consomment les graines de quelques centaines de plantes différentes. Heureusement, il n'est pas nécessaire d'offrir un aussi grand éventail de ressources à un poste d'alimentation.

Avec quatre ou cinq variétés, il est possible de satisfaire les goûts de tous les oiseaux granivores. Les graines cependant doivent être de tailles différentes de façon à convenir autant aux espèces qui possèdent un bec relativement petit qu'à celles qui ouvrent les graines à coup de bec. Les graines les plus propices pour les oiseaux de notre région sont les graines de tournesol, le maïs, le millet, l'orge, le sarrasin et les noix.

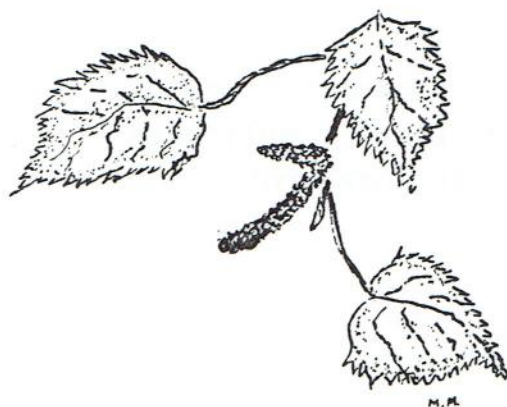
Pourvu qu'on prenne les précautions nécessaires afin de les conserver au sec, il est plus économique d'acheter ces aliments en grandes quantités. On peut facilement se les procurer dans les coopératives agricoles et même à l'intérieur de certains magasins à rayons.

Le menu quotidien d'un poste d'alimentation est donc simple à préparer, car il s'agit de choisir et de présenter avec soin quatre ou cinq aliments qui sauront satisfaire aux besoins nutritifs des oiseaux. A titre de l'heureux propriétaire d'un poste d'alimentation vous pourrez par la suite profiter d'un passe-temps agréable et instructif.

Great Trees of New Brunswick



As a bicentennial project, the Canadian Forestry Association of New Brunswick has launched its "Great Trees of New Brunswick" program. It seeks to identify trees that are significant by virtue of their size (diameter, height, crown spread), age, beauty, or historic associations. Members of the public are asked to submit their nominations. Among the trees nominated so far are a 200-year-old elm in St. Andrews, another elm that is a landmark on the road between Glassville and Juniper and a pair of great lindens in Gagetown. It is believed that the Department of Natural Resources Forest Extension Service will help with the verification of nominated trees. A list of the "Great Trees of New Brunswick" will in time be published by CFA of N. B. and possibly suitable markers eventually put in place. Participation by as many people as possible is invited. Naturalists should be well placed to make significant contributions. So, if you know about a tree of exceptional size, beauty or historic significance, write to:



Great Trees Program
Canadian Forestry Association of N.B.
65 Brunswick Street
Fredericton, N. B. E3B 1E5

Peter Pearce

Rare New Brunswick Plants

Oh Where? Oh Where can Phipp's Lake Be?

The continuing saga of the search for the Lesser Purple Bladderwort

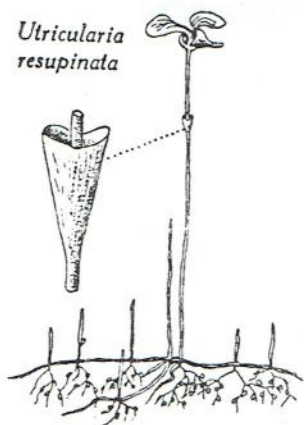
Hal Hinds

The specimens are nearly a hundred years old, but they are there for anyone to see at the New Brunswick Museum Herbarium, the Gray Herbarium of Harvard University, and the National Museum Herbarium and Department of Agriculture Herbarium in Ottawa. The label reads: "*Utricularia resupinata* Greene; abundant in sandy soil in shallow and still water; Phipp's Lake, Long Reach, Kings County, N. B.; collected by Colin H. Livingstone; July 13-20 and August 10, 1896."

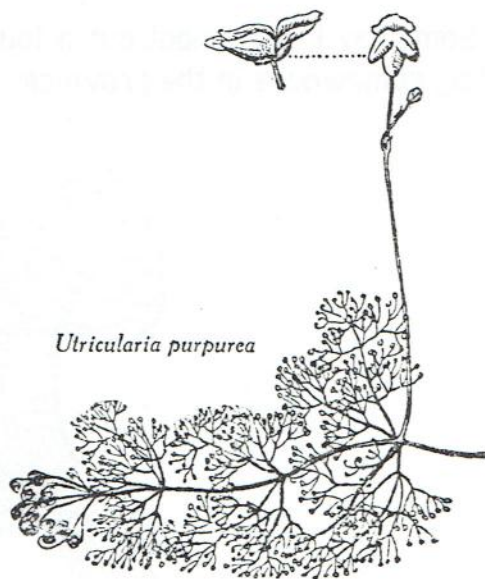
During the last eight years as I have been doing field work towards a comprehensive vascular flora of the Province, I have attempted to relocate the original sites of plants that have few documented sightings. I have spent an inordinate amount of time searching for Phipp's Lake and the Lesser Purple Bladderwort – but all without reward!

Most perplexing is the fact that I cannot find any mention anywhere in New Brunswick of a Phipp's, Phillips, Fitts, or Fritz Lake or any other lake that sounds remotely like Phipp's Lake in the Long Reach area of Kings County. I have explored various sandy shored lakes in July and August, hoping this elusive wilding might be more general in the lakes of the area, but only yellow bladderworts do I find.

*Utricularia
resupinata*



Utricularia purpurea



We have two purple bladderworts in the province, which I here call the Greater Purple Bladderwort (*Utricularia purpurea*) and the Lesser Purple Bladderwort (*U. resupinata*). They are separated as follows.

	<u>Greater (<i>U. purpurea</i>)</u>	<u>Lesser (<i>U. resupinata</i>)</u>
Habit:	Mostly free floating or tangled with other vegetation.	Rooted in muddy or sandy soil in shallow water or at water's edge.
Flower number:	1 to 4	Single
Flower Colour:	Violet or red violet with yellow spot on lower lip	Completely violet
Leaves:	5 to 7 slender, repeatedly branched leaves arising from one point along the stem and bearing bladders at their tips.	Very narrow, grass-like, up to 3 cm long, arising singly from underground stem; bladders from roots at base of leaves

The bladders of the bladderworts serve to entrap minute aquatic animals which the plants digest and utilize as mineral nutrients.

The Lesser Purple Bladderwort occurs sparingly in Nova Scotia and in our general area is also rare in Maine and Québec. Because the plant is rooted to the bottom, it probably would not survive a permanent rise in water level due to damming unless re-established again from elsewhere.

If anyone has any information on the whereabouts of Phipp's Lake or has a clue as to what Mr. Livingstone was thinking when he put Phipp's Lake on his labels, please get in touch with me at the Biology Department, University of New Brunswick, Fredericton.

Some day I will shout out a loud hurray as I explore the shore of some body of water, somewhere in the province, and you will know why!

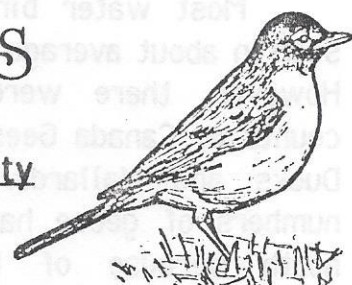


Colts foot.

Christmas Bird Counts

1984-85: Record Effort and Variety

David Christie



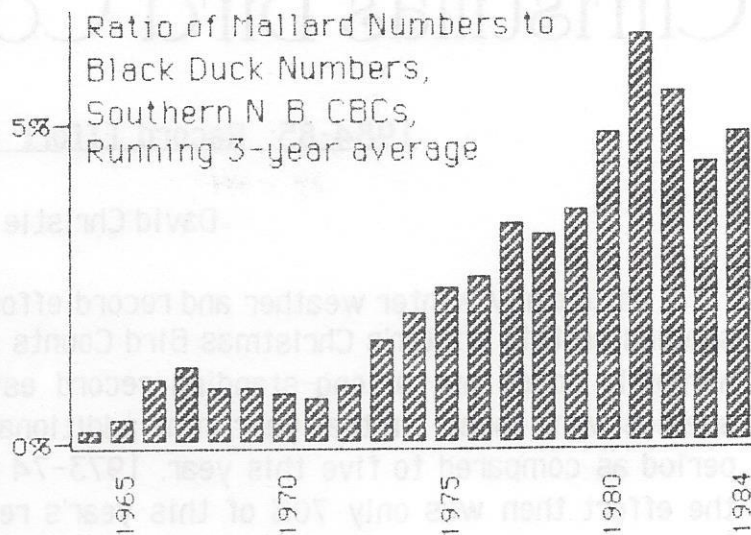
Mild early winter weather and record effort contributed to a high number of species on this winter's Christmas Bird Counts (CBCs). The 117 species reported narrowly edged out a long-standing record established in 1973-74, when 116 species were found. In that year, nine additional species were found during count period as compared to five this year. 1973-74 was remarkable, considering that the effort then was only 70% of this year's record 882 party-hours. The total number of birds, 81,953, this winter was about 6,000 less than last year's record.

Weather conditions were reasonably favorable for most counts but strong winds adversely affected the tallies, especially of small land birds, in the areas surveyed December 26. Sackville observers were hampered by reduced visibility in fog and mist and the December 28 counts by snow in the afternoon. At Fredericton, where observers spent 130 party-hours afield in good conditions, 55 species, an inland CBC record, included provincial record totals for seven species. Saint John, Hartland and Mount Carleton areas also had particularly good counts.

Only one species, a White-winged Dove, which spent almost three weeks visiting bird feeders in the Fundy National Park area, was new to the list of those reported on New Brunswick CBCs. It was the third, possibly fourth, provincial report of that southern vagrant in 1984. This was only the second year in which four other species have been reported on counts: Sanderling (Grand Manan), Dunlin (St. Andrews and Riverside-Albert), phalarope sp. (Grand Manan), and Sharp-tailed Sparrow (Saint John). Two rarities during count period were a Carolina Wren at Grand Manan and three (!!) Varied Thrushes at Florenceville.

The compilers of 20 out of the 28 counts reported on the abundance of certain food sources in their areas. There were generally moderate to large amounts of most kinds of seeds and fruits but there were few great invasions of finches or other irruptive, winter birds. Abundant this winter were spruce and fir cones, especially in Charlotte County, at Fundy Park and in northwestern New Brunswick, and fleshy fruits (of rose, mountain ash, etc.), particularly in southwestern areas. Populations of mice and hares, important to most raptors, varied from very small to moderate.

Most water birds were seen in about average numbers. However, there were record counts of Canada Geese, Black Ducks and Mallards. Large numbers of geese had stayed north because of the late freeze-up and were moving south during much of the CBC period. Black Duck and Mallard counts probably were also affected by mild weather but, in addition to that, Mallard populations have been growing throughout eastern North America for the last 20 years.



They have increased from less than 0.5% to about 5% in proportion to Black Duck numbers in southern New Brunswick (see accompanying graph). Even if you disregard the Moncton area, which has the majority of our Mallards, there has been a five-fold increase of Mallard populations.

Low counts of Oldsquaw may indicate that many of them were staying farther north than usual at Christmas time. But what about the Horned Grebe? Five is the fewest since 1962, when there was much less effort. Normally, we have from 20 to 60 of them. Bufflehead numbers were quite low this year, whereas the numbers of Common Eider, Iceland Gulls and Great Black-backed Gulls were well above average.

It was not a very good year for birds of prey. At best, Bald Eagles and Sharp-shinned Hawks were in about normal numbers. Goshawks and Rough-legged Hawks populations seemed especially low. Owl counts were also rather low. Our raptorial songbird, the Northern Shrike, was seen in below average numbers.

The Ruffed Grouse tally was up to a high level again, after a drop last year. Observers found an average number of Ring-necked Pheasants and the *first* Gray Partridge *since 1968*. Rock Dove numbers were about normal while Mourning Doves continued the increasing trend which has been almost uninterrupted since 1973. A provincial record of 182 were counted at Fredericton and during count period they were found as far north as Plaster Rock and Newcastle-Chatham.

Pileated Woodpeckers are doing very well in the Saint John valley, where four areas had totals of 5 or more. The habitat created by an ample supply of

large, dead elm trees may be the reason. A near average total of Downy Woodpeckers was slightly exceeded by the higher than usual number of Hairy Woodpeckers, which included a provincial record of 46 at Fredericton. Normally, Downies outnumber their larger relative. Both "three-toed" woodpeckers numbered above average; Black-backs were widely distributed whereas the scarcer Three-toed was confined to northern areas.

Gray Jay numbers were about the same as in recent years, yet they seem less common than they were ten years ago in southern areas or five years ago in the north. Blue Jays were about average overall but the Fredericton count exceeded the previous provincial record by over 60%. Ravens and Crows were found in near normal numbers.

Black-capped Chickadees were a bit above average but Boreal Chickadee numbers were low. Red-breasted Nuthatches were numerous at Fundy Park and in small to moderate numbers elsewhere, but there were few White-breasted anywhere. About an average number of Brown Creepers were found. It was a good but not exceptional year for Golden-crowned Kinglets, which, as is often the case, were most numerous in southeastern areas.

Eight Mockingbirds were seen at Moncton this year, three each at Grand Manan and Fredericton, and Robins were the second most numerous species at Saint John. Can those really be New Brunswick CBCs? Many Robins had probably stayed north to feed on the abundant crop of wild fruits and then, having exhausted the supply, were forced to move south at a very late date. Their flight happened to coincide with the Saint John CBC, when observers noted flocks, totalling almost a thousand, moving west along the shore. Where they had come from is not known at this time. There were still many fruits on some mountain ash in the eastern parts of Saint John at the time. Elsewhere Robin numbers were a bit above average.

An other great fruit-eater, the Bohemian Waxwing, must have found a good supply of food in the west since the CBC total for New Brunswick was the lowest in the last five years, a mere 10 birds. A provincial record 7000+ European Starlings were found at Saint John; elsewhere their numbers were near normal. Was this large count of Starlings, which also feed commonly on mountain ash berries, related to the flight of Robins? There might be a connection.

Only four Northern Cardinals were counted this year, down from numbers of the last five years. Among native sparrows, the lack of much early winter snow was probably responsible for below average numbers of the more common wintering species, the Tree Sparrow and "Slate-coloured" Junco. White-throated,

Song and Fox Sparrows were found in about normal numbers. Local small groups of Swamp and Savannah Sparrows and a few individuals of other summer sparrows may not have survived in a less open season. The near average number of Snow Buntings were concentrated on the east coast and in the upper Saint John valley. Only a few Lapland Longspurs but an above average number of Horned Larks were found.

With the exception of Rusty Blackbird, which was more numerous than usual, blackbird numbers were at near average levels. Three areas missed Northern Orioles that were present during the count period.

Pine Grosbeaks were at their lowest level in over a decade, although three areas did have moderate counts. Purple Finches were scarce, except in the most northern areas. White-winged Crossbill numbers were higher than they have been for many years. Counts of them at Grand Manan, Fundy Park and Moncton exceeded the previous provincial CBC record. As usual, very few Red Crossbills were seen. Among the small finches, the numbers of Common Redpoll were very low (they obviously stayed north), Pine Siskin moderate (but a good count at Mount Carleton), and American Goldfinch high. Only on 1964 and 1966 CBCs have more Goldfinches been seen per party-hour. A good population of Evening Grosbeaks, similar to that of the previous two years, included a record of over a thousand at Fredericton.

This year much of the CBC is presented in a two-page table as opposed to four and a half pages last year. I can easily read the original from a distance of six feet, so I hope you will have no problem with the printed reduction (62%) in your hand. The remainder of the information is listed on subsequent pages.

North American Christmas Bird Counts

The Christmas Bird Count was conceived in 1900 by Frank M. Chapman, editor of *Bird-Lore* magazine. The National Audubon Society sets the rules and designates the period during which counts are to be conducted each year.

Over 1400 North American counts, including several from New Brunswick, are published in the July-August issue of *American Birds*. That summary and list of results costs \$10 (U.S.) and a full year's subscription (six issues) is \$21 (U.S.) from American Birds, 950 Third Avenue, New York, N.Y. 10022.



1984-85 CHRISTMAS BIRD COUNTS

Grand Manan Channel (GMC)

Dec. 29; 11:55-13:25. Mostly cloudy. Seas calm. 2°C; wind NNE, 13 km/h. Two observers in 2 parties. Total party-km, 32 (all by boat).

Brian Dalzell (compiler), Rob Walker.

Grand Manan Island (GM)

Dec. 28; 8:00-16:30. Overcast in a.m., light snow in p.m. 0-2.5 cm new snow; fresh-water mostly frozen, salt-water open. -12° to -2°C; wind SSE, 0-40 km/h. Eight observers in 4-7 parties, plus 6 persons at 6 feeders. Total party-km, 265 (39 on foot, 194 by car, 32 by boat).

Vernon Bagley, Brian Dalzell (compiler), Rod Gardner, Virginia Greene, Margaret Lambert, Merle Lambert, Verna MacKenzie, Elaine Maker, Roger Maker, Geraldine Nelson, Carl Small, Nancy Small, Rob Walker, Flora Zwicker.

Eastport-Campobello (E-C)

Dec. 26; 8:00-17:00. Clear. Ground bare; fresh-water mostly frozen, salt-water open. 3° to 4°C; wind NW, 16-88 km/h. Ten observers in 3 parties. Total party-km, 261 (3.2 on foot, 258 by car).

Sid Bahrt, Fran & Thurlo Collier, Ellen Johnson, Zack Klyver, Lori Larsen, Hubert & Nellie Ross, William Townsend (compiler), Rick Wilt.

St. Andrews (StA)

Dec. 26; 9:00-17:00. Cloudy to overcast. Very little snow cover; most brooks unfrozen, salt-water open. -12° to -7°C; wind NW, 40 km/h. Two observers in 2 parties plus 7 at 7 feeders. Total party-km, 80 (29 on foot, 51 by car).

Mrs Hollis Bartlett, Michael Dadswell, Mrs Donald Johnston, Mrs. Ken Langmaid, Daryl Linton (compiler), Mrs Francis McLeese, Doreen Scott, David Walker, Vladimir Zitko.

Pennfield (PEN)

Dec. 26; 7:30-17:00. Sunny with overcast periods; Ground bare; high tide at 14:30. -8° to 0°C; wind W swinging to N, 48-96 km/h. Three observers in 2 parties plus 2 at 1 feeder. Total party-km, 40 (5 on foot, 35 by car).

Ralph Eldridge, Margaret Lloyd, Lena Morehouse (compiler), Mendell Morehouse.

Saint John (SJ)

Dec. 29; 7:40-17:00. Overcast; Ground varying from bare to 4 cm snow cover; rivers partly open, lakes frozen, salt-water open. -1° to 3°C; wind SW swinging to N and back to SW, 5-22 km/h. 15 observers in 6 parties plus 10 at 10 feeders. Total party-km, 43.2 (15.3 on foot, 415.9 by car).

David Christie (compiler), David Clark, Chad Coles, Jaakko Finne, Jack Hollway, Cecil Johnston, Mrs R.B. Kelly, Ron Knorr, Jean Lambert, Isabel LeBlanc, Vivian Macdonald, Mary Majka, Betty & Tom McAlpine, Don McAlpine, Doreen McIntosh, Tom Page, Blanche Peacock, Joan & Ron Pearce, Evan Smith, Molly Smith, Reg Smith, Lawson Stockford, Jim Wilson.

Fundy National Park (FNP)

Dec. 18; 7:45-18:00. Overcast in a.m., with light snow in p.m.; 0-10 cm snow on ground; lakes and ponds frozen, sea and brooks open. -2° to 4°C; wind ENE, 0-18 km/h. 29 observers in 10 parties plus 8 at 8 feeders. Total party-km, 305.1 (87.1 on foot, 198.7 by car, 19.3 by boat) [Also from 0:25 to 2:05, 1.8 hours and 23.7 km while owling.]

Marjorie Bowron, Michael Burzynski, Freda Butland, David Christie, Vincent Crowston, Brian Dalzell, Elaine Eagles, Thomas Gallant, Lisa Groseclose, Doris Hatt, Donald Kimball, Danny Lane, Angus MacLean, Denise MacLean, Melanie MacLean, Stella MacLean, Mary Majka, Anne Marceau, Dale Morton, Allan Nicol, Bonnie Nicol, Paul Perkison, Mark Phinney, Marguerite Richard, Doreen Rossiter, Lee Saunders, Ronald Seale, Frank Sinclair, George Sinclair, Marie Sinclair, Sedgewick Sinclair, Eugene Taylor, Brian Townsend, Robert Walker, Duane West, Stephen Woodley, Blair Wood.

SPECIES	GMC	GM	EC	STA	PEN	SJ	FNP	RA	SCK	MTN	CT	KNP	MIR	SSX	HTN	CN	JEM	FTN	STY	WSK	HRT	FLO	PA	PR	NIC	MIC	SEU	TOTAL
Red-thr Loon	1	4	6	7	2	1	4				1							3										29
Common Loon																												1
Pied-bill Grebe	3		2		1																							5
Horned Grebe	4	23																										27
Red-neck Grebe	4	23																										67
Grt Cormorant	4	28	24		10																							8
D-cr Cormorant																												3
Great Bl Heron	1		CP				1	CP			5	1					CP		8									8
Brant	95																											100
Canada Goose						52	27	12	CP	CP	1373	2000				CP	79		159		CP		29					3731
Green-wing Teal						1			1																			2
Am Black Duck	235		626	171	24	395	13	564	113	434	486	90						199										3353
Mallard	11		5	2		5	1	24	5	185	13							5										256
Northern Pintail						1																						1
Canvasback						2																						2
Ring-neck Duck						3																						3
Greater Scaup	42		5			12		2			2							20										83
Common Elder	4	135	11	1686		1	1				12	10																1860
Oldsquaw	3	70	34	18	71	1				207		114																517
Black Scoter	10		1		8					14																		33
Surf Scoter	13		164		1					4																		182
Wh-wing Scoter	19		15	23			1			16		210																284
Com Goldeneye	368		103	42	3	147		4		523		2			1		1	278			2	15						1486
Barr Goldeneye	65		62	56	9	53																						4
Bufflehead																												245
Hood Merganser										1																		2
Com Merganser			6	7	3	81	17		13	6	8			10	2		CP	55			2	21	12		1			272
Red-br Mergans	7	113	66	3		35				92		2			4						CP	1						318
Bald Eagle	5		3	1		1				CP								2										18
Norbn Harrier	1					1											1	2					CP					3
Sharp-Shin Hawk						1	1		CP	1							CP	2					CP					10
North Goshawk						1	1	CP								CP		1					CP					3
Red-tailed Hawk			2			1	1	CP			3			1	1			1			1	2						9
Rough-leg Hawk		2				1	1	1	3								5				1	3						12
Americ Kestrel			1							1						1												2
Martin									POS																			1
Gyr Falcon																												POS
Gray Partridge										1																		1
R-rnk Pheasant									20	52											26	6	4	CP	1			109
Spruce Grouse											1																	1
Ruffed Grouse					6	2	33	2	8	4	13	18	3	4	7	8	1	15	CP	1	5	7	5	1	10	1	9	163
Sanderling	43		19					145																				43
Purple Sandpiper	75					1																						240
Dunlin				4																								5
phalarope sp.		12						1																				12
Bonaparte's Gull		1	CP																									2
Ring-billed Gull			2			5		4			70																	82
Herring Gull	15	2500	1788	336	809	960	34	45	113	3950	419	48	83	17	105		9	850										12081
Iceland Gull		2				82	2	14	7	210	103				1			5										426
Glaucous Gull			1		15	5		1		3								2										36
Grt Blk-bk Gull	49	215	230	15	57	218	5	14	93	2350	122	38	193	9	9		1	550										4168
B-leg Kittiwake	65	175	4952																									5192
Dovekie	2	6	CP																									8
Thick-pl Murre	2	5							POS																			7
Razorbill	9	2	40																									51
Black Guillemot	6	82	7	50	25																							97
Rock Dove			64																									3678
Wh-wing Dove					2				270	244	85	12	203	220	44	25	CP	725	2	201	423	674	2	41	63			1
Mourning Dove			3	77	16					17																		510
Grt Horned Owl	34					60	CP	1	CP			1	CP	CP	60		2	132		5	16	31	CP	CP	1		3	
Snowy Owl							CP		1								CP				1	1						3
Barred Owl																1		1										2
Short-ear Owl						1																						1
N Saw-whet Owl																												1
Belted Kingfisher			CP																									CP

SPECIES	GH	EC	SIA	PEN	SJ	FNP	RA	SK	MTN	CT	KNP	MIR	SSX	HTN	CN	JEM	FTN	STY	WSK	HRT	FLO	G-J	PA	PR	NIC	MIC	SEU	TOTAL
Yel-b. Sapsucker	3		4	1	16	26	3	1	11	5		14	3	10	14	5	36		8	6	27	1	8	7	8	3		1
Downy Woodpeckr	5		3	1	8	16	1		8	6		12	2	3	25	5	46		13	9	28	4	5	10	7	4		220
Hairy Woodpeckr																												225
3-toed Woodpeckr																												3
Bk-bk Woodpeckr	1					3								3	1	3	1				2	2	CP		3	5		24
Northn Flicker																												37
Pileated wdpeckr					CP	1	2				2				5	1	9	CP	CP	1	1			5	5	4	CP	2
Horned Lark					6			15	16	7			30															68
Gray Jay				1	1	17	7	21	169	41	9	10	5	61	99	71	454	29	63	98	1	4	2		5	18	6	127
Blue Jay				5	99	29	46	111	48	115	8	167	56	55	10	16	219	2	45	8	43	47	31	43	8		2086	
American Crow	112	190	40	461	168	11	44	111	48	115	5	23	21	55	10	16	219	2	45	8	43	1	8	2				1758
Common Raven	155	21	2	13	46	47	64	89	135	42	18	114	103	73	99	67	189	59	25	79	226	65	18	31	116	9	2	1907
Bk-cap Chickadee	68	6	28	11	141	286	49	90	143	146	52	132	48	161	178	206	656	10	101	117	465	18	19	46	70	48	3	3298
Boreal Chickadee	8					42	6	25	8	35	2	4	2	1	7	8	7			7	CP	10	CP	5	11	19		193
Red-br Nuthatch	7		1		4	45		3	4					3	7	8	12			7	5	CP	CP		2	5		113
Wh-br Nuthatch																												13
Brown Creeper	CP				CP	4	1	2	1	2				1	2	1	1			2	CP							17
Carolina Wren																												CP
Winter Wren																												2
Gold-cr Kinglet	14	6		CP	2	63	13	36	19	51	14		8	2	10	4	4	5		4	1		CP			2		258
Ruby-cr Kinglet						1									2 ^a		3											6
American Robin	13	7	2	19	966	3	2		3	8	1	3		1	1	1	7		CP	1	CP		CP		CP			1038
Varied Thrush					CP				8								3											CP
Bohem Waxwing	3																10											14
Northern Shrike	CP																											10
European Starling	330	961	125	42	7327	51	162	579	1430	410	2	441	435	578	52	46	899	12	82	134	189	3	CP	39	10			14337
Yel-th Warbler																												68
C Yellowthroat	CP																											CP
Northn Cardinal	1				1			1																				4
Dickcissel	2							CP					CP															2
A Tree Sparrow	46		9	CP	37	4	19	31	62	64		2	10	26	70	139	96		7	7	67	2	10					710
Chipping Sparrow			2 ^a			1	1																					3
Field Sparrow																												1
Savannah Sparrow					2		5		1																			8
Shp-1 Sparrow	CP				2																							4
Fox Sparrow					1																							53
Song Sparrow	8		4		7	3	1	2	20	3				1	2		2											7
Swamp Sparrow					6		1																					73
Wh-thr Sparrow	3			CP	24	15	6	CP	1			2	5	8	3		3				1							155
Wh-thr Junco	6			CP	28	25	22	17	7			5	2	25	4		9				5							5
Dk-eyed Junco					2			3																				2282
Lapd Longspur							7	490	20	792	90	100	1	1	CP	56	2			146	290	202	CP	85				15
Snow Bunting	2		CP			3	3		3					1	1		1											12
Red-w Blackbird	2		1		4			1	110			1	1	1	2		3		5			2	4					74
Rusty Blackbird	2		1	5																	2	2	7					199
Comm Grackle	10		19		44	35	18		13		CP	6	23	23	3	CP	3				2							CP
Brn-ld Cowbird	14				CP																							
Northern Oriole	CP										6	3		12	44	1	1				9		2	1	13	61	3	144
Pine Grosbeak					1	CP															5		2	5	39	29		94
Purple Finch																												15
Red Crossbill																												815
Wh-w Crossbill	270				6	230	31	24	70	1		8	8	20	15	27	POS			42	CP		7		30	26		
Common Redpoll						23		40	CP		6				13		10				12							104
Pine Siskin	22		48		40	12	4	1	6	6		1		1	1		34	8			2	2	CP	4	9	170	50	416
Arctic Goldfinch	45	2	7	CP	102	7		1	110	5		16	53	62	161	141	408	18	CP	3	30							1185
Evening Grosbeak	112	6	90	CP	149	34	54	97	476	9	CP	190	15	294	244	218	1058	CP	162	143	376	8	16	101	92	2		3946
House Sparrow	156	29	4		93	26	167	550	382	75	12	733	360	101	114	95	812	23	181	356	711	287	85	79	108			5539
Unidentified	21 ^c				20	23	18	6	35	35				1 ^m		4 ^h	57 ^h			22 ^h						50 ^h		371
TOTAL BIRDS	188	9444	3082	1628	11793	1252	1599	2883	10651	5505	2771	2478	1451	1769	1220	1230	8150	169	926	1655	3611	671	297	538	624	465	59	81953
TOTAL SPECIES	12	64	37	36	66	49	43	38	45	46	27	32	31	40	32	36	55	11	16	34	38	20	18	23	25	20	5	117
Count period spp.	5	4	3	4	4	4	4	5	4		1	5	1	0	3	8	(1)	3	4	1	7	2	9	2	1			5
Hours on foot	17.2	2.0	8.0	3.0	12.0	46.5	20.1	38.5	28.5	37.0	32.5	9.0	6.0	12.5	6.8	20.0	70.0	1.2	2.8	15.0	21.0	9.0	4.0	3.5	19.0	25.0	3.0	473.1
Hours by car	15.5	20.0	6.0	7.0	19.2	11.0	15.3	25.2	35.0	15.8	6.5	16.0	11.0	18.5	20.5	15.5	60.0	7.0	13.0	4.0	26.0	16.0	6.0	3.5	2.0		2.0	397.5
Hours otherwise	1.5	5.8				4.0		63.7	63.5	52.8	39.0	25.0	17.0	31.0	27.3	35.5	130.0	8.2	15.8	19.0	47.0	25.0	10.0	7.0	21.0	25.0	5.0	881.9
TOTAL HOURS	1.5	38.5	22.0	14.0	10.0	31.2	61.5	63.7	63.5	52.8	39.0	25.0	17.0	31.0	27.3	35.5	130.0	8.2	15.8	19.0	47.0	25.0	10.0	7.0	21.0	25.0	5.0	881.9

Riverside-Albert (R-A)

Jan. 1; 7:30-17:25. Overcast with a few periods of light snow (no significant accumulation); Ground partly bare with thin patches of snow and ice; rivers mostly frozen, lakes frozen, sea open. -13° to -11°C ; wind NE, 25-40 km/h. 7 observers in 5 parties plus 10 at 8 feeders. Total party-km, 406.5 (38.5 on foot, 368 by car).

Myrtle Beaman, Mildred Carpan, David Christie (co-compiler), Brian Dalzell, Halton Dalzell, Sawny Dubberke, Sue Fullerton, Shannon Inman, Angus MacLean, Stella MacLean, Mary Majka (co-compiler), Mieczyslaw Majka, Mrs Don Milburn, Allan Nicol, Rob Walker, Glenn White.

Sackville (SCK)

Dec. 17; 7:35-17:00. Overcast with periods of fog and mist (8:00-13:00) reducing visibility, especially along the coast; ground bare and only partially frozen; fresh-water mostly frozen except streams and runs, salt-water open. 6° to 10°C ; wind SW, 30-50, diminishing to 15-30 km/h by 13:00, to light by dusk. 16 observers in 6-11 parties. Total party-km, 518 (69 on foot, 449 by car).

Peter Barkhouse, Felix Baerlocker, Paul Bogaard, Tony Erskine, Jocelyne Gauvin, Eugene Goodrich, Hinrich Harries, Alan Hanson, Randy Hicks, Ron Hounsell, David Kean, Colin and Nancy Mackinnon, Kathy Popma, Al Smith (compiler), Stu Tingley.

Moncton (MTN)

Dec. 16; 8:00-16:45. Mostly sunny a.m., partly cloudy p.m.; no snow on ground; fresh-water mostly frozen, salt-water open. -17° to -2°C ; wind SSW, 8-40 km/h. 16 observers in 8-12 parties plus 10 at 8 feeders. Total party-km, 447 (40 on foot, 407 by car).

Brenda Burzynski, David Christie, Albert Cormier, Don Cormier, Brian Dalzell (compiler), Halton Dalzell, Barbara Diehl, Mary Fownes, Ford Keith, Ed Kervin, Louis Lapierre, Fred Lloyd, John Loch, Mary Majka, Mieczyslaw Majka, Gordon Mosher, Nelson Poirier, Winston Prince, Esther Proude, Fulton Proude, Ruth Rogers, Barb Swinamer, Rob Walker, Alma White, Don White, John Wright.

Cape Tormentine (CT)

Dec. 15; 7:30-16:45. Cloudy with periods of light snow flurries becoming mostly sunny by 15:00; ground mostly bare; fresh-water frozen, salt-water open with considerable slush in protected coves. -10° to -6°C ; wind N, 5-10, increasing to 8-12 km/h in p.m. 10 observers in 5-8 parties. Total party-km, 405 (77 on foot, 328 by car).

Paul Bogaard, Brian Dalzell, Steve Daniel, Tony Erskine, Jocelyne Gauvin, John Loch, Ralph Stopps, Al Smith (compiler), Stu Tingley, Rob Walker.

Kouchibouguac National Park (KNP)

Dec. 19; 8:00-16:00. Clear; 5-10 cm snow on ground; fresh-water frozen, lagoon and salt-water open. -4° to -1.5°C ; wind NE to SE, 2-4 km/h. 14 observers in 8 parties. Total party-km, 212.8 (72.8 on foot, 140 by car). [4 hours and 10 km of the effort on foot were by skis.]

Gilles Babin, Harry Beach, Bert Crossman, Gérald Daigle, Gordon Delaney, Guy Desroches, Noël Fontaine (compiler), Jean-Guy Gaudet, Lucille LeBlanc, Carmel Lévesque, Claude Richard, Pierrette Robichaud, Michel Savoie, Harold Sock.

Chatham-Newcastle (MIR)

Dec. 29; 8:00-16:00. Scattered cloud in a.m., overcast in p.m.; 40 cm snow on ground; almost all water frozen. -10° to -3°C ; wind S, calm to very light. 11 observers in 4 parties plus 21 at 22 feeders. Total party-km, 390 (20 on foot, 370 by car).

Margaret Adams, Sybil Anderson, Barbara Archibald, Mrs William Arnoldus, V.J. (Jeep) Bosma, Eileen Bransfield, George Cadogan, Monica Charnley, Phyllis Crowe, Barbara Digdon, Frank Garrish, Vernon Goodfellow, Linda Hartlen, Don Hoddinot, John Keating, Mrs Robert Lisk, Hazen Lobban, David Lounsbury, Sara Lounsbury, Wendy Mathews, Denis Mazerolle, Lemuel McDonald, Theresa Ross, Delta Steeves, Maureen Toner, Lawrence Tozer, David Tweedie, Elayne Walker, Harry Walker (compiler), Winnie Walker, Margaret Wheaton, Bert Woulds.

Sussex (SSX)

Dec. 15; 9:15-17:10. Overcast, clearing in p.m.; no snow on ground; still water frozen, flowing water open.

-10° to 0°C; wind calm. 6 observers in 4 parties plus 9 at 9 feeders. Total party-km, 200.5 (6.5 on foot, 194 by car).

Tom Anderson, Eleanor Arnold, Margaret Broomhead, David Christie, Barbara Diehl, Harriet Folkens (compiler), Walter Hunter, Ted Keating, Gerald & Helen MacKenzie, Evelyn Robinson, Carl Steeves, Ralph Willis, Tina Upham.

Hammond River-Hampton (HTN)

Dec. 30; 7:00-16:00. Overcast in a.m., clear in p.m.; 2.5 cm snow cover; most fresh-water frozen. -6° to 2°C; wind W, 20-25 km/h. 17 observers in 5 parties plus 11 at 11 feeders. Total party-km, 345 (18 on foot, 327 by car).

Robert Barton, Annie Blacquiere, Richard Blacquiere, Janet Boyle, Grant Brenan, David Christie, Chad Coles, Rollie Darling, Jaakko Finne, Harold Harding, Kathy Hazlett, Freddie Holt, Mrs Hazen Inches, Jean Isaacs, Duncan Kelbaugh, Peggy Kelbaugh, Mrs Neil MacDonald, Mary Majka, Anne Murdock, Mary Murdock, Tom Page, S. Pledge, Geoff Sayre, Molly Smith, Sally Taylor, Charles Wilson, Jean Wilson, Jim Wilson (compiler).

Cambridge-Narrows (C-N)

Dec. 28; 8:15-16:30. Cloudy, light snow in p.m.; 10 cm snow in woods, fields bare; lakes frozen, brooks mostly frozen. -13° to -8°C; wind W, 0-10 km/h. 10 observers in 5 parties plus 11 at 10 feeders. Total party-km, 354 (14 on foot, 340 by car).

Doris Appleby, Marion Belyea, Dilys Carpenter, Lawrence Carpenter, James Connell, Thora Connell, Joan Fanjoy, Enid Inch (compiler), Rhoda Inch, Doug Jackson, Debora Kantor, Eileen Kincaide, Dot McConnachie, Nellie Perry, Audrey Perry, Lillian Pugsley, Joyce Robinson, Joyce Thorne, Niven Thorne, Phyllis Thorne, Carl Urquhart.

Jemseg (JEM)

Dec. 30; 8:00-17:00. Overcast in a.m., clear by late p.m.; Fields snow-covered; most water surfaces frozen. -1° to -8°C; wind NW, 24-40 km/h. 14 observers in 7 parties plus 1 at 1 feeder. Total party-km, 279 (27 on foot, 252 by car).

Gerry Clayden, Leta Clayden, Susan Clayden, Janice Garrity, Nev Garrity (compiler), Don Gibson, Don Kimball, Peter Pearce, Rudy Stoczek Jr, Rudy Stoczek Sr, Owen Washburn, Susan Washburn, Max Wolfe, Blair Wood.

Fredericton (FTN)

Dec. 16; 0:30-3:00 and 8:00-22:15. Overcast all day; 10 cm snow on ground; most water surfaces below Fredericton frozen, most above not frozen. -11° to 5°C; wind SW, 15-20 km/h. 56 observers in 24 parties; 110 feeders checked. Total party-km, 775 (125 on foot, 650 by car).

Dan Breen, Rae Brown, Dan Busby, Eric Carr, Gerry Clayden, Susan Clayden, Jim Coles, Sarah Colwell, Rod Currie, Lucy Dyer, Eric Emery, Allison Fitzgerald, Jeremy Forster, Margaret Forster, Don Fowler, Janice Garrity, Nev Garrity, Don Gibson, Scott Gilliland, Lionel Girouard, Heidi Grein, Nathalie Hamel, Harold Hatheway, Hal Hinds, Joyce Hubbard, Allison Huberts, Donald Kimball, Louise Landry, Lionel LaPointe, John LeMesurier, Nancy Lutes, Milda Markauskas, Albert Morais, Paul Nicholson, Jean Noble, Jim Noble, Steve Oliver, Marven Palmer, Christopher Pearce, Peter Pearce (compiler), Theresa Pearce, Edward Petrie, Mark Phinney, Vincent Poirier, Nagmani Rangaswami, Bev Schneider, Marc Schneider, Doug Stanley, Rudy Stoczek, Rudy Stoczek, Jr., Jane Tarn, Peter Thomas, Glenda Turner, Leon Vietinghoff, Owen Washburn.

Stanley (STY)

Dec. 30; 7:45-16:00. Overcast, becoming clear by mid-p.m.; ground covered with 10-50 cm snow with light crust; water frozen except for fast areas. 0° to -8°C; wind N, 2-5 km/h. 2 observers in 1 party. Total party-km, 175 (4 on foot, 171 by car).

Peter deMarsh, Harold Hatheway (compiler).

Woodstock (WSK)

Dec. 26; 9:00-16:00. Clear; 10 cm snow on ground; water frozen. 6° to 7°C; wind NW, 60 km/h. 12 observers in 4 parties plus 20 at 20 feeders. Total party-km, 127 (5 on foot, 122 by car).

Leona M. Avery (compiler), Robert Avery, Fred Beatty, Louis Beatty, Rev & Mrs Tom S. Bellis, Harold Bonnell, Mrs Paul Clark, Claude Connell, Marjorie Connell, Mrs Gerald Damming, Lucy Dyer, Mrs Nelson Flewelling, Mrs David Fry, Eric Hadley, Mrs Doris Hagerman, Mrs Harold Hatfield, Mr & Mrs Ken Homer, Murray Hubbard, Lucy

Jarvis, Mrs Charles MacDonald, Walter Neal, Mrs. G.A. Olmstead, Eric Randall, Mrs Ralph Sexsmith, Alma Speer, Robert J. & Donna Speer, Mrs Donald St. John, Helen Weld.

Hartland (HRT)

Dec. 28; 8:30-17:00. Cloudy, with snow in afternoon, heavier snow later; ground frozen, fields 75% covered with up to 15 cm snow, 15-45 cm snow in woods; water 75-80% frozen with ice chunks in 15% of open water. -20° to -9°C; wind S, 0-5 km/h. 8 observers in 5 parties plus 9 at 9 feeders. Total party-km, 115 (20 on foot, 95 by car).

Ford Alward, Greg Belyea, Arthur Bryant, Anna Canam, Diane Clark, Ruth DeLong, Avis Foster, Jeff Horne, Lori-Anne Horne, Jane Hovey, Don Kimball, Winnie Lawrence, Bob McIsaac, Sheila Palmer (co-compiler), Michael Rigby (co-compiler), Belle Swim, Guy Tompkins.

Florenceville (FLO)

Dec. 29; 8:00-17:00. Partly overcast in a.m., light rain by 13:00; 10-20 cm snow cover (10 cm fresh); Saint John River open (frozen about 3 m from edge) below Beechwood Dam, frozen above; water low. -5° to 0°C; wind S, nil to very light. 24 observers in 8 parties plus 50 at 50 feeders. Total party-km, 481.5 (30.5 on foot, 451 by car). [5.5 hours and 5 km of effort on foot were by ski.]

Walter Allison, Ford Alward (compiler), Eleanor Arnand, Archie & Vivienne Bishop, Donald Bishop, Attle Boyd, Bob Boyer, Mrs Elmer Briggs, Nancy Brown, Gertrude Buchanan, Jennie Burnham, Ross Burnham, Stanley Burt, Ansel Campbell, David Campbell, Jean Carmichael, Mrs Helen Crabbe, Wilbert Curtis, Otis Derrah, Robert Derrah, Larry Dow, Els Ebbett, Frances Giberson, Mrs Henry Giberson, Violet Giberson, Don & Frances Green, Walter Green, Ron & Jeanette Greene, David Hatt, Betty Hayward, Gordon Hunter, Eleanor Kearney, Holland Kearney, James Kearney, Paul Leahey, Jim Leland, Chris Lloyd, David Lloyd, Alice Lockhart, Alex Matheson, Harold McGrath, Bob G. McIsaac, Wanda McIsaac, Margaret McIsaac, Don McLean, Mott McLean, Melody McNair, David & Susan McNair, Pearl McNair, Murray Nicholson, David Olmstead, John Patterson, Tom Petley, Pat Post, Lloyd Ripley, Trudy Rogers, Marie Sappier, Bamford Smith, Peggy Smith, Jack Soucie, Bill Stewart, Larry Sweet, Gretchen Thomas, Joanne Upton, Fred Welch, Phillip White, Brian & Donna Wortman, Kenneth Wortman, Jasper Wyman.

Glassville-Juniper (G-J)

Dec. 26; 8:00-20:00. Overcast; ground snow-covered; -7°C; wind W, 32 km/h and gusty. 8 observers in 3 parties plus 3 at 3 feeders. Total party-km, 168.8 (8.8 on foot, 160 by car).

Ford Alward, Ansel Campbell, Jennifer Clement, Peter Clement, Marge Martinson, Brian McIntosh, Sally McIntosh (compiler), Dennis Puleston, Peter Puleston, Marion Spence, Jessie Welsh.

Perth-Andover (P-A)

Dec. 28; 8:00-16:00. Cloudy in a.m., some snow p.m.; 18-20 cm snow on ground; only rapids open. -18° to -10°C; wind calm. 2 observers in 1 party plus 3 at 2 feeders. Total party-km, 103 (3 on foot, 100 by car). Mrs Thelma Craig, Bernice Hafner, Bruce Johnston, Fred Tribe, Murray Walters (compiler).

Plaster Rock (PR)

Jan. 1; 9:00-16:00. Cloudy with some sunny periods; 30 cm snow cover; some open water in river but mostly frozen. -8° to -4°C; occasional gusty winds. 5 observers in 2 parties plus 6 at 3 feeders. Total party-km, 49 (11 on foot, 38 by car).

Mr & Mrs John Anderson, Gwen Clyde, Doris Crawford, Mr & Mrs Roy Doody, Kate Finnemore and her mother, Irene Hollins, Laverne Rabatich (compiler), Melissa Skinner.

Nictau-Riley Brook (NIC)

Dec. 29; 8:00-17:00. Partly cloudy; 35 cm snow on ground; Tobique River mostly open, frozen over in places. -10° to -13°C; wind NW. 3 observers in 3 parties plus 7 at 5 feeders. Total party-km, 63 (20 on foot, 43 by car).

Joan & Alex Fraser, Bette Howard, Cella Knowlton, Erwin Landauer, Bill Miller, Wilma Miller (compiler), Rudi & Elizabeth Richter, Ursula Schmidt.

Mount Carleton Provincial Park (MtC)

Dec. 18; 8:00-16:00. Light snow; 15 cm snow on ground; still water frozen, running water open. -5° to -3°C; wind SW, 7 km/h. 4 observers in 4 parties plus 2 at 2 feeders. Total party-km, 51 (on foot).

Girouard, E. Higgins, R. Jenkins, E. Landauer (compiler), J. Landauer, R. Richter.

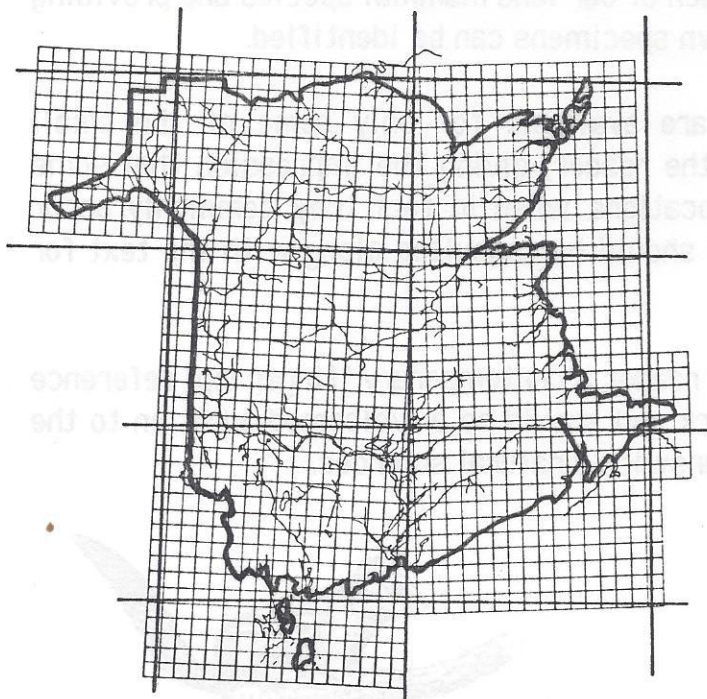
Southeast Upsalquitch (SEU)

Dec. 28; 10:00-15:00. Clear; 25 cm snow on ground; ice on river. -10° to -15°C; wind NE, 16 km/h. 2 observers in 1 party. Total party-km, 15 (3 on foot, 11 by car).

Christopher Gauthier, Ron Gauthier (compiler). [This count lasted only 5 hours, less than the 6 hours we normally require for acceptance, but is included because of its past history and remote location.]

Abbreviations and Footnotes to the Table

*	high count a provincial record	h	1 falcon sp. (probably dark Gyr Falcon),
**	first time on N.B. counts		1 raptor sp., 1 alcid sp. (possibly
CP	recorded during count period (Dec. 15 to Jan. 2)		Razorbill), 2 sparrows sp., 1 songbird sp.
POS	possible sighting of this species	i	20 ducks sp., 15 songbirds sp.
a	no details submitted or details not fully convincing	j	including ducks sp. (probably mergansers)
b	by boat	k	1 hawk sp., 5 gulls sp., 1 woodpecker sp.
c	12 large alcids sp.	m	1 hawk sp.
d	124 murres sp.	n	1 woodpecker sp., 1 finch sp., 2 birds sp.
e	2 sparrows sp., 18 finches sp.	p	2 ducks sp., 2 crossbill sp. (probably
f	1 scoter sp., 1 owl (<i>Strix</i> sp.), 21 finches sp.		White-winged), 50 finches sp., 3 birds sp.
g	1 sparrow sp.	q	50 finches sp.
		r	1 gull sp, 1 "3-toed" wdpkr sp., 20 bird sp.



Atlas Squares

With last issue's article on the breeding bird atlas project, we had intended to include a map of 10 km squares for New Brunswick but in the usual rush of final preparations for the printer, it got omitted. For your belated information, here it is now.

Book Reviews

Land Mammals of New Brunswick. Edited by Tim Dilworth. 1984. Published by Tim Dilworth, 270 University Avenue, Fredericton, N. B. \$15.

*Reviewed by D. J. Cartwright**

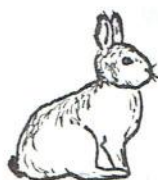
There have been no recent publications consolidating information on the mammals of New Brunswick - *Land Mammals of New Brunswick* does this. It is a book that will be easily read by either the lay person or scientist. Although species descriptions utilize technical nomenclature, any terminology that the reader wishes to clarify can be easily found in an appended glossary and skeletal description.

As the authors point out in their introduction, the information available on populations of New Brunswick mammals is far from complete, although our knowledge in this area is continually growing. This publication draws together information from many New Brunswick mammal studies, providing the reader with regional data on individual species whenever it is available.

Land Mammals of New Brunswick is well suited to the naturalist, offering a complete dissertation on each of our land mammal species and providing the reader a key through which unknown specimens can be identified.

Provincial distribution maps are available for only some of the small mammals and may be misleading to the reader, giving the impression that some species are found only in specific locations when in fact they commonly occur throughout the Province. These maps should be consulted along with the text for an accurate species distribution.

This book offers the interested reader a contemporary "finger tip" reference to all land mammals in New Brunswick and should be a welcomed addition to the library of those interested in New Brunswick's natural sciences.



* Fish and Wildlife Branch, Dept. of Natural Resources, Fredericton E3B 5H1

Birdwatching - New Brunswick, Canada



Where should you go for the best birdwatching in New Brunswick? A high quality brochure, just published by the Department of Tourism in cooperation with the Canadian Wildlife Service, will answer that question.

The folder presents ideas for beginners, descriptions of landscapes and climate, a month-by-month summary of bird activity, a guide to 16 summer and nine winter birdwatching areas, information on special projects, a list of local organizations and suggested further reading. Concise, informative text is complemented by a map and 37 colour photos.

Designed to answer the growing number of inquiries about birds from people planning a visit to New Brunswick, the folder is available at no cost by writing Tourism New Brunswick, P.O. Box 12345, Fredericton, N. B. E3B 5C3, or by phoning toll free 1-800-442-4442 (in New Brunswick) or 1-800-561-0123 (elsewhere). If you get an inquiry, pick up the phone and ask that the visitor be sent a "Birdwatching" folder. It's as simple as that.

The N. B. Federation of Naturalists warmly welcomes this addition to Tourism New Brunswick's travel information and hopes that it may be the first of a series of similar guides. Ironically, the Canadian Wildlife Service's interpretation program, which spearheaded the production, will be eliminated in federal government cutbacks on March 31. - DSC



Observation des oiseaux - Nouveau-Brunswick, Canada

Un nouveau dépliant illustré (produit par le Service canadien de la faune et Tourisme Nouveau-Brunswick) "vise à présenter... certains des endroits de la province qui se prêtent le mieux à l'observation des oiseaux, à promouvoir les organisations ornithologiques de la province et à favoriser les activités organisées en ce sens ainsi qu'à indiquer des sources de renseignements complémentaires. Ce dépliant devrait s'avérer aussi utile pour l'ornithologue d'expérience que pour l'amateur ou le débutant, le naturaliste ou le voyageur qui veut observer les oiseaux pendant ses vacances, ou encore pour le résident qui veut connaître les localités propices à l'observation des oiseaux dans son coin de la province."

On peut se procurer ce document gratuit en s'adressant à Tourisme Nouveau-Brunswick, C.P. 12345, Frédéricion, N.-B. E3B 5C3, ou en téléphonant à 1-800-442-4442 (au N.-B.) ou 1-800-561-0123 (à l'extérieur de la province). DSC

Nature News

Autumn 1984

David Christie



New Brunswick's dry late summer weather continued though a sunny, mild autumn season. Practically all the reports received this fall concerned birds.

The few other items that can be noted are an exceptionally heavy crop of mountain ash berries which, combined with the heavy spruce and fir cone crop, mentioned in the last issue, provided an ample food supply for seed- and fruit-eating birds and mammals.

It was reported to have been an excellent summer for observing seabirds and whales, including Right and Humpback Whales, in the Grand Manan area; a number of White-sided Dolphins spent three to four weeks east of the island (Jim Leslie), farther up the bay than they are usually seen regularly. Several Humpbacks were feeding inshore near the Swallowtail in early October (Ken Edwards), when Fin and Minke Whales could be seen in the Grand Manan Channel (DSC & Majkas).

BIRDS

The most unusual birds this fall were a Sandhill Crane, a Mew Gull and a Townsend's Solitaire.

The Sandhill Crane, frequenting a Nauwigewauk farm, was discovered Sep. 13 by Mark Phinney, but farmer Bill Wood had first noticed it Sep. 10. Seen and photographed by numerous observers, it remained until Sep. 22 (Cecil Johnston). Two previous reports of this species in New Brunswick were brief observations of birds apparently migrating: 1 at Point Lepreau Oct. 7, 1973 (Johnston) and 2 at Kent Island in late May 1981 (Louis Pitelka *et al.*). Sandhill Cranes generally migrate through the centre of the continent but a few individuals from arctic breeding grounds follow more easterly routes that take them through the Maritimes and New England.

An adult Mew Gull was found Nov. 11 at Silver Lake, Middle Sackville, by Stuart Tingley, who was able to show it to other observers the following day. New Brunswick's first Mew Gull was found at Sheffield May 4-5, 1969 (Peter Pearce *et al.*). Subsequently, individuals were reported at Grand Manan and Saint John. The Sheffield bird was *Larus canus brachyrhynchus*, the subspecies found in

western North America but we might also see the European subspecies, *L. c. canus*, a few of which reach eastern Newfoundland each winter.

The Townsend's Solitaire sat briefly on a treetop at Marys Point Nov. 4, just long enough to allow Mike Majka a good look, and then moved on. New Brunswick's first solitaire had been more cooperative, feeding daily on fruits in the late Mrs. A. B. Connell's garden at Woodstock from Jan. 15 till Apr. 16, 1952. Another of these western visitors paid a visit to Mary's Point in October 1975.

A highlight of the fall was the visit of Cecil Johnston, Stuart Tingley and Jim Wilson to Grand Manan Sep. 23-26. Joined part of the time by David Clark and Brian Dalzell, they were fortunate to have planned their visit at a time when a good variety of vagrant birds were present. Among their finds were: a Yellow-throated Vireo at White Head (Stuart earlier had seen one at North Head Sep. 7), a Blue-winged Warbler at Ingalls Head, and a Prairie Warbler at North Head Sep. 24, two Pine Warblers (Castalia and Ingalls Head), two Blue Grosbeaks (Bancroft Point and White Head), and a Lark Sparrow at White Head Sep. 25, and probably three different Indigo Buntings Sep. 24-25. Others of their sightings appear elsewhere in this account.

Among pelagic birds reported were two Northern Fulmars, 250 Greater Shearwaters, two Sooty Shearwaters, 2500 unidentified phalaropes and an immature Sabine's Gull 15 km SE of White Head Oct. 11 (BDD) and 175 Fulmars, 15 Greater Shearwaters, a Manx Shearwater and 75 Atlantic Puffins about 10 km S of Kent Island Nov. 17 (BDD). An adult Sabine's Gull was at the Swallowtail Sep. 16 (BDD) and a Manx Shearwater and a Parasitic and two Pomarine Jaegers off The Whistle, G.M., Sep. 23 (Wilson *et al.*)

Great Cormorants formerly nested in New Brunswick in the outer Bay of Fundy but apparently were driven out by disturbance of their nesting colonies. However, a breeding population recently has become established near Mount Desert Island, Maine, and summering individuals have increased in the Grand Manan area, where two of 10 Great Cormorants on a rocky islet off White Head Island were playing with a stick in mock nest-building behaviour Oct. 13 (DSC *et al.*). Hunting under the new *year-round* open season on cormorants conceivably could discourage this cormorant from re-establishing breeding colonies in the province.

There were few reports of vagrant herons this fall. A white, immature Little Blue frequented Waterside Marsh Sep. 4-11 (Rob Walker *et al.*) and an immature Yellow-crowned Night-Heron was identified at Ashburton Head, G.M., Sep. 17 (BDD). The description of a bird flushed by David Malcolm, while canoeing at

Springfield, Kings County, closely resembles a Least Bittern, a rare breeding species in New Brunswick (*fide* Pearce).

More than the usual number of Snow Geese were reported: 16 at Lake Edward Oct. 5 (Erwin Landauer), 24 at Glassville (Conrad Leroux, *fide* Pearce) and 40 at Evandale (Craig Parker, *fide* Wilson) Oct. 6, 12 at Cambridge-Narrows Oct. 8 (Niven & Joyce Thorne), and 15 at Grand Harbour Oct. 14 (Howard Zwicker, *fide* BDD). Canada Geese were migrating from the last week of September into early winter. A Ruddy Duck was noted at Great Pond, G.M., Sep. 16 and 3 were there Nov. 8 (BDD).

A Turkey Vulture was seen twice in the third week of October at Midway, near Riverside-Albert (Ron Hounsell). Other rare birds of prey included an immature Cooper's Hawk at Bancroft Point, G.M., Oct. 29 (BDD), a Red-shouldered Hawk, harassed by crows, at Fredericton Oct. 14 (Pearce), a subadult Golden Eagle at Eleven Mile Brook, near Nictau, Sep. 26 (DSC and Majkas), and a possible Golden Eagle at Hartland Nov. 21 (Ford Alward).

About 15 Peregrine Falcons were reported at a number of locations along the Bay of Fundy and one was inland at Sisson Ridge Oct. 2 (Landauer). One Peregrine at Marys Point attempted to kill a Ruffed Grouse, which was crossing the road Sep. 19, but the grouse struggled and got away (Mary Majka). That was not the only falcon with an ambitious appetite: a male American Kestrel repeatedly tried to catch a flicker at Nictau Sep. 26 (DSC *et al.*) and a Merlin was chasing a Willet at Red Head Sep. 16 (Jaakko Finne). On Oct. 17 two Merlins were after smaller prey, phalaropes, but 15 km at sea from White Head (Dalzell)!

At the Chignecto Campground sewage lagoon in Fundy National Park, a peak of 13 Solitary Sandpipers Aug. 25 dwindled into mid September (Angus MacLean). Brian Dalzell periodically checked shorebird numbers at Castalia Marsh on the rising tide. The peak numbers of some species there were 120 Ruddy Turnstones Aug. 26, 300 Black-bellied Plovers Sep. 9, and 65 Greater Yellowlegs and 110 White-rumped Sandpipers Sep. 22. (The peak for such common species as Least and Semipalmated Sandpipers, Short-billed Dowitchers, Lesser Yellowlegs and Semipalmated Plovers occurred earlier in July or August. At Mary's Point Sanderlings were most numerous (600) Oct. 17 (DSC) and Dunlin (450) Nov. 6 (DSC).

Juvenile Baird's Sandpipers were seen Sep. 8, at Castalia (Tingley *et al.*) and at Marys Point (DSC & Mary Majka) and a Stilt Sandpiper at Castalia Oct. 7 and 14 (BDD), while Buff-breasted Sandpipers were reported at Saints Rest, Saint John West, one Aug. 25 and two Sep. 2 (Wilson) and one Sep. 16 (Finne).

Jeremy and Margaret Forster closely studied seven dowitchers, while feeding and in flight, at Fredericton Oct. 14. The birds' calls were heard clearly and the Forsters are sure that some, perhaps all, were Long-billed Dowitchers. On the same day the last Short-billed of the season was seen at Castalia (BDD *et al.*) It is not easy to distinguish these two species. In New Brunswick, the Short-billed [both dowitchers have very long bills but this species' beak is shorter on average] is by far the dominant species but rarely one may find a few Long-billed Dowitchers, mainly in fall after most Short-billed have gone. Calls are especially useful in distinguishing the dowitchers but there are also plumage points to consider. For a good discussion refer to the *National Geographic Society Field Guide to North American Birds* and *The Audubon Society Master Guide to Birding*. The other guides are weak on these two species.

Other inland shorebirds were 12 Lesser Golden-Plovers at Fredericton Oct. 21 (Don Gibson) and 12 Pectoral Sandpipers and 3 Dunlin there Oct. 23 (Pearce). There were 13 Killdeer at Williamstown, near Centreville, Oct. 13 (Carmichael).

Adult Little Gulls were seen Sep. 6 at Deer Island Point, Deer Island, (Tingley) and Sep. 23 off The Whistle (Wilson *et al.*), where there was also a Common Black-headed Gull.

Few Yellow-billed Cuckoos turned up this fall. Three or four were seen on Grand Manan between Sep. 27 and Oct. 24 (BDD) and one at Marys Point Oct. 21 (DSC). The only Red-headed Woodpecker reported was an adult at Pocologan Nov. 4 (Wilson & Johnston). Two Western Kingbirds were seen at Alma, one Oct. 24 (Doreen Rossiter) and a more dull-plumaged bird Nov. 14 (Walker), while four were reported on Grand Manan between Sep. 25 and Oct. 18 (BDD, Wilson *et al.*). Yellow-breasted Chats were found at Alma Oct. 23-24 (Stella MacLean & Rossiter), Herring Cove, Fundy Nat'l Park, Oct. 23 (Angus MacLean), The Whistle Sep. 27 and North Head Nov. 10 (BDD) and at Fredericton Oct. 13 (Pearce).

Very few Eastern Screech-Owls are reported in New Brunswick. Brian Dalzell was lucky enough to find one, of the gray plumage type, at Woodward's Cove, G.M., Nov. 8. A few Snowy Owls appeared in November, with individuals reported at Grand Manan (BDD), Saint John (Bud Crandall) and Moncton (*Times-Transcript*). A Long-eared Owl found injured at Perth Oct. 24 had been shot in the wing (Roger Jenkins).

Both Jean Carmichael, reporting for the Valley Naturalists, and Laverne Rabatich, at Plaster Rock, commented that increasing numbers of Pileated

Woodpeckers are being seen. It is a bit surprising that a species dependent on large trees should be increasing at the same time as the extent of older forest in the province is being quickly reduced by cutting. Perhaps this magnificent bird is benefiting from the prevalence of dying elm and budworm-killed conifers.

A House Wren was seen along The Whistle Road, G.M., Oct. 6 (Pearce) a (Long-billed) Marsh Wren at Long Eddy Point, G.M., Sep. 27 (BDD) and one at Saints Rest Oct. 8 (Wilson *et al.*) and 19 (Phinney). Four Blue-gray Gnatcatchers were seen this fall: one at Marys Point Sep. 7, a different bird there from Oct. 24 to Nov. 16 (DSC *et al.*), one at White Head Sep. 24 (Tingley *et al.*) and one at the Swallowtail Sep. 27 (BDD).

The only Eastern Bluebirds reported were the family resulting from a nesting at White Head, where two adults and four young were seen Sep. 25 (BDD *et al.*), and another six at Keswick Ridge Oct. 3 (Leona Keenan). An adult Northern Mockingbird, accompanied by a speckled juvenile, appeared on Cecil Johnston's lawn at Saint John West Sep. 19, indicating that the birds seen thorough the summer apparently had nested successfully again in his neighbourhood.

The only Bohemian Waxwing reported was one seen eating mountain ash fruits at Hammond River, Quispamsis, Oct. 22 (Wilson). A late Cedar Waxwing was in Alma Nov. 16 (Rossiter). European Starlings were conspicuous this fall. About 3000 were seen catching flying insects along the highway between Ste-Anne-de-Madawaska and Grand Falls in the early evening of Sep. 25 (DSC & Majkas) and a flock of between 2000 and 3000 was at Saints Rest Oct. 13 (SJNC).

A Warbling Vireo was found at The Whistle Sep. 17, four Philadelphia Vireos at Grand Manan during September and a particularly late one at Ross Island Oct. 16 (BDD). Richard Poulin reported 6 Orange-crowned Warblers at Juniper in October (*vide* Pearce). Two immature Prairie Warblers were at Marys Point Sep. 22 (DSC *et al.*).

Peter Pearce reports what may have been a Hooded Warbler at Fredericton Sep. 30, adding, in frustration, that this was his third hypothetical sighting of this species, for which there are only two firm sight records in the province. Also in the not positive category was a possible female or immature Yellow-headed Blackbird at Salt Springs in October (Wilson).

Alma was the Dickcissel capital of New Brunswick this fall, birds being present there from at least Oct. 13 to Nov. 8, with a maximum of four in late

October (Rossiter *et al.*). Individuals were also seen at Ross Island Sep. 19 (BDD) and Marys Point Oct. 19 (DSC). A few Rufous-sided Towhees showed up: a female at Bancroft Point Oct. 6 and a male there Oct. 20 (BDD), one at Saint John West Oct. 10 (Johnston), another or the same 2 km away Oct. 26 (Bruce Bosence) and a male at Alma Oct. 21 (MacLeans). An immature Clay-coloured Sparrow was at The Whistle Oct. 10 (BDD), a Grasshopper Sparrow at Castalia Sep. 25 (Kenneth Edwards, *vide* BDD), and a Seaside Sparrow at Saints Rest Beach Oct. 28 (Finne *et al.*) Individual "Ipswich Sparrows" (now a subspecies of Savannah Sparrow) were at Castalia Oct. 11 (DSC & Majkas) and at Saints Rest Oct. 28 (Finne *et al.*)

Small numbers of White-crowned Sparrows were reported between Sep. 27 and Oct. 19, with the peak numbers being nine at Sisson Ridge Oct. 2 (Landauer) and seven at Bancroft Point Oct. 9 (BDD). Lapland Longspur reports included counts of up to 15 at Saints Rest (Wilson) and 18 at Castalia (BDD *et al.*) during mid-October. A very early flock of Snow Buntings at Divide, near Glassville, Sep. 27 (Wallace Wiley) was followed by a single bird migrating at Southwest Head Oct. 12 (DSC & Mary Majka). Arrivals were noted at a few locations during the last week of October.

The White-winged Crossbill was *the* finch of the fall. Large numbers were reported along the Fundy coast, where in addition to many small groups the following were reported: 350 at Ross Island Oct. 18, 175 at Middle Dam, near Seal Cove, Oct. 19, 165 at Bancroft Pt. Nov. 13, 240 at Grand Harbour Nov. 21 (BDD), and 200 migrating east at Marys Pt. Oct. 20 (DSC). Numbers must have been smaller inland where the only observer to report them was Jean Carmichael who saw 24 at Williamstown Oct. 23. A few Red Crossbills were also seen at Grand Manan in September and October (BDD). Pine Grosbeaks and Common Redpolls mostly stayed on their breeding grounds since few were seen. A lone redpoll visited Doreen Rossiter's feeder at Alma on an early date, Oct. 18. A single male House Finch at Grand Harbour Nov. 21 (BDD) had been noticed about a month earlier by the lady who owned the feeder it was visiting.

Earliest reports of some fall arrivals were: an Oldsquaw at Florenceville Oct. 16 (Jean Carmichael); a Bufflehead at Pocologan Sep. 7 (BDD); a light phase Rough-legged Hawk at Saints Rest Oct. 13 (SJNC); an Iceland Gull 15 km SE of White Head Oct. 11 (BDD); an immature Glaucous Gull at The Whistle Oct. 12 (DSC); an Am. Tree Sparrow at Alma Oct. 20 (Rossiter), one at Oakland, near Stickney, Oct. 21 (Ansel Campbell) and several at Fredericton Oct. 23 (Pearce); a Fox Sparrow at The Whistle Oct. 10 (BDD) and one at Saint John West Oct. 13 (SJNC).

Despite the mild weather there weren't a lot of unusually late summer birds. Just a few of the latest reports were: a Green-backed Heron at Sisson Ridge Oct. 1 and 2 (Roger Jenkins); five American Wigeon at Great Pond, G.M., Nov. 21 (BDD); two Ring-necked Ducks at Marys Point Nov. 27 (DSC); two Hooded Mergansers at Meehan's Cove, Quispamsis, Nov. 11 (Wilson); a Northern Harrier (Marsh Hawk) at Florenceville Nov. 22 (Alward); an Am. Coot at Nauwigewauk Nov. 17 (Wilson); a Black-bellied Plover at Saints Rest Nov. 25 (Finne); two Hudsonian Godwits at Saints Rest Nov. 3 (Johnston & Finne); a Red Knot at Saints Rest Nov. 17 (Finne); a Dunlin at Saints Rest Nov. 25 (Finne).

A Common Nighthawk at North Head Oct. 6 (Pearce & BDD); a Ruby-throated Hummingbird at Castalia Oct. 11 (Mary Majka); a Great Crested Flycatcher at Castalia Bank, G.M., Nov. 15 (BDD); a Tree Swallow at Westfield Oct. 5 (Pearce); a Barn Swallow at Saints Rest Oct. 10 (Wilson);

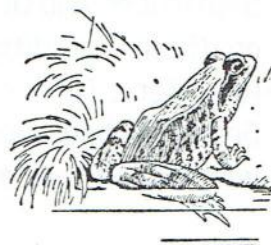
A Northern Parula at Fredericton Oct. 25 (Pearce); two Magnolia Warblers at North Head Oct. 10 (BDD); a Black-throated Blue Warbler at Alma Oct. 24 (A. MacLean); a Yellow-rumped (Myrtle) Warbler at Florenceville Nov. 23 (Alward); a Palm Warbler at Alma Nov. 5 (Walker) and 1 at Marys Pt. Nov. 16 (DSC); a Black-and-White Warbler at Williamstown Oct. 11 (Carmichael) and one at Alma Nov. 5 (Doris Hatt); an American Redstart at Alma about Oct. 20 (Rossiter); a Common Yellowthroat at Fredericton Nov. 4 (Pearce); a Song Sparrow at Florenceville Nov. 16 (Campbell).

Abbreviations

BDD - Brian Dalzell
DSC - David Christie
et al. - and others

G.M. - Grand Manan
SJNC - Saint John Naturalists' Club

Museum News



On August 5, 1984, a plaque, commissioned by the board and staff of the New Brunswick Museum in memory of former curator Stanley W. Gorham, was unveiled by Keith Ingersoll in the museum's natural science gallery.

Rene Gorham, other members of the Gorham family, museum staff and a large number of Stan's friends and associates attended the ceremony, following which a period of refreshments offered an opportunity to reminisce about Stan and express admiration for the quiet man who was held in high regard by all who knew him.

Federation News

Department of Environment Cutbacks

Few people can be unaware of the large cutbacks planned by the federal government, especially in the areas of the arts, science and environment. Particularly hard hit has been the Canadian Wildlife Service (CWS).

On November 14 NBFN president Gayl Hipperson wrote to the Minister of the Environment, Mme Blais-Grenier and to the Minister of State for Forestry, Gerald Merrithew, New Brunswick's representative in the Cabinet, protesting the virtual elimination of the CWS' Wildlife Research and Interpretation Division and urging review of the decisions. Copies were sent to opposition party environment critics and to certain local MPs.

Atlantic Region programs to be cut included work on endangered species and the impacts of intensive forest management and forest spraying on wildlife (the toxic chemicals program at Fredericton). With federal funding for a modern toxicology research centre also being cut, Gayl stated the Federation's position that "With the continuing proliferation of new chemicals, many of which find their way into the environment, it seems essential to us that more, not less, basic research and environmental monitoring be conducted to ensure that potential ecological problems are detected before they seriously affect animals, plants, and humans as well," and she suggested that the government, while promoting intensive forestry methods "has an attendant responsibility to support environmental monitoring of the effects."

As of March 8, NBFN has had no reply from either minister, although in response to a large amount of protest from the public, Mme Blais-Grenier reinstated six positions in three programs with high public support, including the budworm spray monitoring program. However, those six positions will be taken away from other CWS programs, so there is no net gain.

Opposition MPs have responded to NBFN letters by providing details of debate in Parliament. Reversal of the decision to abolish the Fredericton program was aided by strong support from York-Sunbury MP Bob Howie. Thousands of citizens have protested CWS cutbacks to the Prime Minister, other Ministers and their local MP.

While responsible fiscal management is a laudable program, so too is responsible environmental management. The appointment of a novice MP as Minister and the extent of the cuts (22% of CWS staff, 3.5% overall in Environment Canada, as compared to about 1% in the whole public service) demonstrate the low priority the Government places on the environment and particularly on the importance of wildlife. The NBFN maintains that wildlife is an important resource in itself, as well as an ecological barometer, studies of which can give early warning of serious environmental problems.

In late December, new NBFN president Hal Hinds called on Federation members to write their own letters of concern to the government. It is evident that support is still required to prevent further environmental cutbacks in the forthcoming budget. Hal is writing again on behalf of the NBFN and renewing his appeal to members to take pen in hand and make their concerns known, for the good of the Canadian environment. - DSC



What Do You Think of the General Hunting Licence?

As previously reported, last September the NBFN wrote to Premier Hatfield, then also Minister of Natural Resources, expressing reservations about New Brunswick's new General Hunting Licence.

Subsequently, we received a response from the Premier who said provisions of the licence will be reviewed before release of the 1985-86 hunting regulations. His department feels that the licence will be used principally by farmers, woodlot owners and fishermen to protect their crops and by sportsmen who wish to target practice. He said that New Brunswickers are basically honest and that no significant increase in poaching or hunting pressure is expected as a result of the extended season.

The NBFN continues to be concerned and is asking the public to report any problems arising from abuse of the new regulations. Complain to your local game warden and also report the details to us, by calling 882-2100 collect, by contacting any NBFN director, or by writing the federation, c/o 277 Douglas Avenue, Saint John, N.B. E2K 1E5. Your information will help us draft our recommendations to the Department of Natural Resources. - DSC

Events Calendar

To Be Immortal – May 4 & 11



To be immortal one must do three things: have a son, write a book and plant a tree – so Socrates said.

Would you like to plant a tree and thus fulfill one of the prerequisites of immortality? You can do it very soon. To commemorate the centennial of National Parks in Canada, the Federation will be planting 100 trees in Fundy National Park on May 4. On May 11 we will do the same in Kouchibouguac National Park.

Why not come and bring a friend, to help him or her on the way to immortality? Bring a picnic and have lots of fun. Meet at 11 a.m. at the appropriate park office. Trees, shovels and water will be supplied. For further information contact Mary Majka, RR 2, Albert, N.B. (882-2100).

Kouchibouguac – Annual Meeting Weekend, May 31 – June 2, 1985

In this year, the one hundredth anniversary of the establishment of Canada's first National Park, it is only fitting that the Federation's annual meeting will take place at Kouchibouguac National Park and focus on the protection of natural areas. Mark it on your calendar – the first weekend in June.

The program extends from Friday evening through Sunday morning. Featured speakers are provincial archaeologist, Dr. Chris Turnbull, and Hank Tyler, director of the Critical Areas Program for the State of Maine. There will be ample choice of interesting field trips, by which to explore this exciting park of bogs and beaches, dunes and lagoons.

The Federation's Annual General Meeting will be held between 11 a.m. and noon and the Conservation Council of New Brunswick's from 5 to 6 p.m. So register right away and give the organizers, the Miramichi Naturalists' Club, a better idea of how many to expect. Registration form enclosed with this issue.

June 2 – "Nightwings" at N. B. Museum

7:30 p.m. Official opening of "Nightwings", an excellent travelling exhibit on bats from the National Museum of Natural Sciences. At 8 p.m., Dr. Brock Fenton, professor at Carleton University, will lecture on bats.

FREDERICTON FIELD NATURALISTS

1985 Field Trip Schedule

<u>Subject and Place</u>	<u>Date and Time</u>
<u>ducks unlimited*</u> --waterfowl migration along the St. John. Jemseg.	21 April at 8:00 a.m.
<u>Crepuscular cadences</u> --woodcock display flights. Hanwell Road.	1 May at 7:00 p.m.
<u>Botanical bonanzas*</u> --early wildflowers. Keswick Ridge.	12 May at 8:00 a.m.
<u>Passerines aplenty</u> --songbird migration. Wetmore's farm.	25 May at 6:30 a.m.
<u>Hyladine highlights</u> --gray tree frogs and other amphibians. Barker's Point.	31 May at 7:00 p.m.
<u>A nodding of naturalists</u> --AGM of NBFN-at Kouchibouguac National Park. (watch <u>N.B. Naturalist</u> for details)	1-3 June
<u>Portobello pleasures*</u> --by canoe through Portobello National Wildlife Area.	22 June at 8:00 a.m.
<u>Park potpourri*</u> --introduction to the natural history of Killarney Lake Park	30 June at 7:00 a.m.
<u>Mushroom madness</u> --a fungal feast. UNB Forest.	14 July at 9:00 a.m.
<u>Calidridine capers</u> --shorebird migration and marsh birds at Shepody National Wildlife Area.	3-4 August at 7:00 a.m.
<u>Invertebrates intertidal*</u> --Littorally speaking, life between the tides. Letete.	14 September at 7:00 a.m.
<u>Geological jollies*</u> --(details to be announced). Vicinity of Saint John.	28 September at 8:00 a.m.
<u>Christmas counts</u> --Bird counts at Fredericton (22 December), Stanley (26 December), Jemseg (29 December).	

Notes

Trips which incorporate a picnic lunch are marked with an asterisk.
Rendezvous - all trips except Portobello (meet at Church Road) and
Christmas Bird Counts will rendezvous at the Lady Beaverbrook Gym-
nasium parking lot at the times noted.

Apparel - warm clothing and waterproof footwear are advised.

Fly dope may be useful on occasion.

Schedule is tentative, so details should be confirmed. Call Peter
Pearce (455-7042), Hal Hinds (455-6467), or Harold Hatheway (455-7540).

Trips open to all interested persons.



NEW BRUNSWICK FEDERATION OF NATURALISTS

277 Douglas Avenue, Saint John, N.B., Canada E2K 1E5 Tel.: (506)693-1196

LA FEDERATION DES NATURALISTES DU NOUVEAU-BRUNSWICK

277, avenue Douglas, Saint-Jean, N.-B., Canada E2K 1E5 Tél.(506)693-1196

The federation is a non-profit organization formed in 1972 to facilitate communication among naturalists and nature-oriented clubs, to encourage an understanding of nature and the environment, and to safeguard the natural heritage of New Brunswick.

La fédération est une organisation sans but lucratif formée en 1972 pour faciliter la communication entre les naturalistes et entre les divers clubs axés sur l'étude de la nature, pour encourager une meilleure compréhension de la nature et de l'environnement naturel, et pour sauvegarder le patrimoine naturel du Nouveau-Brunswick.

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